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Alfred Marshall Mayer, 1836–1897. (With portrait.) ALFRED G. MAYER and ROBERT S. WOODWARD. Presented at the Autumn Meeting, 1915. Pp. 243–72.

George William Hill, 1838–1914. (With portrait.) ERNEST W. BROWN. Presented at the Annual Meeting, 1916. Pp. 275–309.

Theodore Nicholas Gill, 1837–1914. (With portrait.) WILLIAM HEALEY DALL. Presented at the Annual Meeting, 1916. Pp. 313–43.

Edward Singleton Holden, 1846–1914. (With portrait.) W. W. CAMPBELL. Presented at the Annual Meeting, 1916. Pp. 347–72.

John Shaw Billings, 1838–1913. (With portrait.) S. WEIR MITCHELL. With the Scientific Work of John Shaw Billings, by FIELDING H. GARRISON. Presented at the Annual Meeting, 1916. Pp. 375–416.

William Stimpson, 1832–1872. (With portrait.) ALFRED GOLDSBOROUGH MAYER. Presented at the Annual Meeting, 1917. Pp. 417–33.

Benjamin Osgood Peirce, 1854–1914. (With portrait.) EDWIN H. HALL. Presented at the Annual Meeting, 1918. Pp. 435–66.

Cleveland Abbe, 1838–1916. (With portrait.) W. J. HUMPHREYS. Presented at the Annual Meeting, 1918. Pp. 467–508.

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William Bullock Clark, 1860–1917. (With portrait.) JOHN M. CLARKE. Presented at the Annual Meeting, 1918. Pp. 1–18.

Arnold Hague, 1840–1917. (With portrait.) JOSEPH P. IDDINGS. Presented at the Annual Meeting, 1919. Pp. 19–38.

James Dwight Dana, 1813–1895. (With portrait.) LOUIS V. PIRSSON. Presented at the Annual Meeting, 1919. Pp. 41–92.

Eugene Woldemar Hilgard, 1833–1916. (With portrait.) FREDERICK SLATE. Presented at the Annual Meeting, 1918. Pp. 95–155.

James Mason Crafts, 1839–1917. (With portrait.) CHARLES R. CROSS. Presented at the Annual Meeting, 1918. Pp. 159–77.

Alpheus Spring Packard, 1839–1905. (With portrait.) T. D. A. COCKERELL. Presented at the Annual Meeting, 1918. Pp. 181–236.

Lewis Boss, 1846–1912. (With portrait.) BENJAMIN BOSS. Presented at the Annual Meeting, 1918. Pp. 239–60.

Charles Sedgwick Minot, 1852–1914. (With portrait.) EDWARD S. MORSE. Presented at the Annual Meeting, 1919. Pp. 263–85.

NOTE: Volume X published as Volume XVII of Scientific Memoirs series; Volume XI in press as Volume XXI of that series.

REPORTS OF COMMITTEES

(Out of print)

Report on the question of the value of the water-proofing process employed in the manufacture of the fractional currency. In House Misc. Doc. no. 163, part 2, 44th Congress, 1st Session, pp. 22–8. April 3, 1876.

Forty-fifth Congress, 3rd Session. House of Representatives Misc. Doc. no. 5. Surveys of the Territories. Letters from the Acting President of the National Academy of Sciences, transmitting a report on the surveys of the Territories. Ordered printed, December 3, 1878. 8°. Pp. 1–27.

Forty-seventh Congress, 2d Session. Senate Misc. Doc. no. 51. National Academy of Sciences. Investigation of the scientific and economic relations of the sorghum sugar industry, being a report made in response to a request from the Hon. George B. Loring, U. S. Commissioner of Agriculture, by a committee of the National Academy of Sciences. November, 1882. Washington: Government Printing Office. 1883. 8°. Pp. 1–152.

United States Internal Revenue. Report on glucose, prepared by the National Academy of Sciences, in response to a request made by the Commissioner of Internal Revenue. Washington: Government Printing Office. 1884. 8°. Pp. 1–108.

Report of committee of National Academy of Sciences concerning classification of Donskoi wool, January 30, 1886. 1886. Treasury Department Doc. no. 805.

Forty-ninth Congress, 1st Session. Senate Ex. Doc. no. 67. Letter from the Secretary of the Navy, transmitting, in compliance with the Senate resolution, February 2, 1886, report of the National Academy of Sciences upon the proposed new Naval Observatory. Ordered printed, February 10, 1886.

Report on the organization of the National Surveys and the Signal Service. In Senate Misc. Doc. no. 82, 49th Congress, 1st Session, pp. 1–37. Ordered printed, March 16, 1886. 1886.

National Academy of Sciences. Standards for electrical measure, February 20, 1895. Printed for the Academy. Washington: Judd & Detweiler, Printers. 1895. 8°. Pp. 1–9.

Fifty-third Congress, 3rd Session. Senate Misc. Doc. no. 115. Report of the National Academy of Sciences, made in compliance with a requirement of the law (H. R. 6500) entitled "an act to define and establish the units of electrical measure," approved July 12, 1894. Ordered printed, February 19, 1895.

Report of the committee appointed by the National Academy of Sciences upon the inauguration of a forest policy for the forested lands of the United States to the Secretary of the Interior, May 1, 1897. Washington: Government Printing Office. 1897. Pp. 1–47.

Fifty-eighth Congress, 3rd Session. Senate Doc. no. 145. Report by committee appointed by Academy to consider desirability of instituting scientific explorations of Philippine Islands. Pp. 1–22. 8°. Ordered printed, February 7, 1905.

Sixtieth Congress, 2d Session. House of Representatives Doc. no. 1337. Conduct of scientific work under United States Government. Message from the President of the United States, transmitting report of the National Academy of Sciences relating to the conduct of the scientific work under the United States Government. Pp. 1–5. 8°. Ordered printed, January 18, 1909.

ANNUALS ISSUED

(Out of print)

1863–4, 112 pp. 1865, 130 pp. 1866, 154 pp.

ANNUAL REPORTS

The Annual Report of the president of the National Academy of Sciences to the Congress of the United States contains an account of the annual and autumn meetings of the Academy, giving the reports of the officers and committees at the business ses-

sions, the grants made in aid of research work, and the medals and prizes awarded; also, a list of the papers presented at the scientific sessions.

The Act of Congress incorporating the Academy in 1863, and the Constitution and Rules of the Academy (which define the system of election to membership) are printed in the Report.

REPORTS ISSUED

For Year	*Pages*	*Printed*	*For Year*	*Pages*	*Printed*	*For Year*	*Pages*	*Printed*
1863	118	1864	1891	39	1892	1909	43	1910
1864	15	1865	1892	39	1893	1910	48	1911
1865	130	1866	1893	47	1895	1911	55	1912
1866	95	1867	1894	43	1895	1912	54	1913
1867	44	1868	1895	51	1896	1913	112	1914
1878	25	1879	1896	39	1897	1914	90	1915
1879	22	1880	1897	93	1898	1915	74	1916
1880 }	24	1882	1898	33	1899	1916	94	1917
1881 }			1899	39	1900	1917	112	1918
1882	16	1883	1900	37	1901	1918	154	1919
1883	145	1884	1901	39	1902	1919	180	1920
1884	69	1885	1902	41	1903	1920	178	1921
1885	101	1886	1903	39	1904	1921	131	1922
1886	41	1887	1904	57	1905	1922	153	1923
1887	55	1888	1905	41	1906	1923	156	1924
1888	41	1890	1906	43	1907	1924	205	1925
1889	69	1891	1907	40	1908	1925	216	1929
1890	36	1891	1908	111	1909			

PART III. LIST OF PUBLICATIONS OF THE NATIONAL RESEARCH COUNCIL AND ITS FELLOWS AND PARTIAL LIST OF PAPERS HAVING THEIR ORIGIN IN THE ACTIVITIES OF ITS COMMITTEES TO JANUARY 1, 1926

The following list of the publications of the National Research Council and of its Fellows, and of other publications having their origin in the activities of its Committees, is a revision and extension of the list which appeared as Reprint and Circular Series Number 25 (February, 1922). It has been compiled with the coöperation of the chairmen and members of the Committees of the Council, and while it is not claimed that it is complete, it presents a fairly comprehensive view of the activities of the National Research Council, in so far as they are represented by published contributions, during the ten years of its existence.

The Bulletin is published at irregular intervals. The subscription price, postpaid, is $5.00 per volume of approximately 500 pages. Separate copies of the Bulletins or of the Reprint and Circular Series may be obtained, at the prices quoted, from the Publications Office of the National Research Council. Other publications listed herein are not available for distribution from this office, except as indicated by an asterisk.

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BULLETIN SERIES

VOLUME 1

Number 1. The national importance of scientific and industrial research. GEORGE ELLERY HALE and others. October, 1919. 43 pp. Price $0.50.

Number 2. Research laboratories in industrial establishments of the United States of America. Compiled by ALFRED D. FLINN. March, 1920. 85 pp. Price $1.00. [Out of print. See Number 16.]

Number 3. Periodical bibliographies and abstracts for the scientific and technological journals of the world. Compiled by RUTH COBB. June, 1920. 24 pp. Price $0.40.

Number 4. North American forest research. Compiled by the Committee on American Forest Research, Society of American Foresters. August, 1920. 146 pp. Price $2.00.

Number 5. The quantum theory. EDWIN PLIMPTON ADAMS. October, 1920. 81 pp. Price $1.00. [Out of print. See Number 39.]

Number 6. Data relating to X-ray spectra. WILLIAM DUANE. November, 1920. 26 pp. Price $0.50.

Number 7. Intensity of emission of X-rays and their reflection from crystals. BERGEN DAVIS. Problems of X-ray emission. DAVID L. WEBSTER. December, 1920. 47 pp. Price $0.60.

Number 8. Intellectual and educational status of the medical profession as represented in the United States Army. MARGARET V. COBB and ROBERT M. YERKES. February, 1921. 76 pp. Price $1.00.

VOLUME 2

Number 9. Funds available in 1920 in the United States of America for the encouragement of scientific research. Compiled by CALLIE HULL. March, 1921. 81 pp. Price $1.00.

Number 10. Report on photo-electricity including ionizing and radiating potentials and related effects. ARTHUR LLEWELYN HUGHES. April, 1921. 87 pp. Price $1.00.

Number 11. The scale of the universe. Part I by HARLOW SHAPLEY. Part II by HEBER D. CURTIS. May, 1921. 47 pp. Price $0.60.

Number 12. Coöperative experiments upon the protein requirements for the growth of cattle. First report of the Subcommittee on Protein Metabolism in Animal Feeding. HENRY PRENTISS ARMSBY, Chairman. June, 1921. 70 pp. Price $1.00.

Number 13. The research activities of departments of the state government of California in relation to the movement for reorganization. JAMES R. DOUGLAS. June, 1921. 46 pp. Price $0.60.

Number 14. A general survey of the present status of the atomic structure problem. Report of the Committee on Atomic Structure of the National Research Council. DAVID L. WEBSTER and LEIGH PAGE. July, 1921. 61 pp. Price $0.75.

Number 15. A list of seismologic stations of the world. Compiled by HARRY O. WOOD. July, 1921. 142 pp. Price $2.00.

VOLUME 3

Number 16. Research laboratories in industrial establishments of the United States, including consulting research laboratories. Originally compiled by ALFRED D. FLINN; revised and enlarged by RUTH COBB. December, 1921. 135 pp. Price $2.00.

Number 17. Scientific papers presented before the American Geophysical Union at its second annual meeting. March, 1922. 108 pp. Price $1.50.

Number 18. Theories of magnetism. By members of the Committee on Theories of Magnetism of the National Research Council. A. P. WILLS, S. J. BARNETT, L. R. INGERSOLL, J. KUNZ, S. L. QUIMBY, E. M. TERRY, S. R. WILLIAMS. August, 1922. 261 pp. Price $3.00. Translated into German by JOSEPH WURSCHMIDT: "Theorien des Magnetismus." Braunschweig, Vieweg & Sohn, 1925. 309 pp. (Volume 74 of "Die Wissenschaft.")

VOLUME 4

Number 19. Celestial mechanics. Report of the Committee on Celestial Mechanics of the National Research Council. E. W. BROWN, G. D. BIRKOFF, A. O. LEUSCHNER, H. N. RUSSELL. September, 1922. 22 pp. Price $0.40.

Number 20. Secondary radiations produced by X-rays, and some of their applications to physical problems. ARTHUR H. COMPTON. October, 1922. 56 pp. Price $1.00.

Number 21. Highway research in the United States. Results of census by Advisory Board on Highway Research, Division of Engineering, National Research Council, in coöperation with the Bureau of Public Roads, United States Department of Agriculture. WILLIAM KENDRICK HATT. October, 1922. 102 pp. Price $1.50.

Number 22. Mechanical aids for the classification of American investigators, with illustrations in the field of psychology. HAROLD C. BINGHAM. November, 1922. 50 pp. Price $0.75.

Number 23. Certain problems in acoustics. Compiled by the Committee on Acoustics, National Research Council. November, 1922. 31 pp. Price $0.50.

Number 24. Electrodynamics of moving media. Report of the National Research Council Committee on Electrodynamics of Moving Media. W. F. G. SWANN, JOHN T. TATE, H. BATEMAN and E. H. KENNARD. December, 1922. 172 pp. Price $2.00.

Number 25. Celestial mechanics. A survey of the status of the determination of the general perturbations of the minor planets. Appendix to the report of the Committee on Celestial Mechanics, National Research Council. A. O. LEUSCHNER. December, 1922. 73 pp. Price $1.00.

VOLUME 5

Number 26. Coöperation with the Federal Government in scientific work. E. W. ALLEN. December, 1922. 27 pp. Price $0.50. [Out of print.]

Number 27. The present status of visual science. LEONARD THOMPSON TROLAND. December, 1922. 120 pp. Price $1.50.

Number 28. Algebraic numbers. Report of the Committee on Algebraic Numbers, National Research Council. L. E. DICKSON, H. H. MITCHELL, H. S. VANDIVER, G. E. WAHLIN. February, 1923. 96 pp. Price $1.50.

Number 29. The status of scientific research in Illinois by state agencies other than the University of Illinois. LEONARD D. WHITE. March, 1923. 83 pp. Price $1.00.

Number 30. Selected topics in the field of luminescence. ERNEST MERRITT, EDWARD L. NICHOLS, C. D. CHILD. March, 1923. 126 pp. Price $2.00.

Number 31. The organization and activities of the Committee on Scientific Research of the State Council of Defense of California. T. H. GOODSPEED. April, 1923. 43 pp. Price $0.75.

VOLUME 6

Number 32. Proceedings of the Second Annual Meeting of the Advisory Board on Highway Research, Division of Engineering, National Research Council. WILLIAM KENDRICK HATT. May, 1923. 89 pp. Price $1.25.

Number 33. On the formulation of methods of experimentation in animal production. E. B. FORBES and H. S. GRINDLEY. June, 1923. 54 pp. Price $1.00.

Number 34. Causes of geographical variations in the influenza epidemic of 1918 in the cities of the United States. A report of the Committee on Atmosphere and Man, of the National Research Council. ELLSWORTH HUNTINGTON, Chairman. July, 1923. 35 pp. Price $0.75.

Number 35. Apparatus used in highway research projects in the United States. Results of census by Advisory Board on Highway Research, Division of Engineering, National Research Council, in coöperation with the Bureau of Public Roads, United States Department of Agriculture. C. A. HOGENTOGLER. August, 1923. 91 pp. Price $1.50.

Number 36. Catalogue of published bibliographies in geology, 1896–1920. Compiled by EDWARD B. MATHEWS. October, 1923, 228 pp. Price $2.50.

VOLUME 7

Number 37. Thermal process time for canned food. CHARLES OLIN BALL. October, 1923. 76 pp. Price $1.50.

Number 38. Fellowships and scholarships for advanced work in science and technology. Compiled by Research Information Service, National Research Council. November, 1923. 94 pp. Price $1.00.

Number 39. The quantum theory. Second edition. Revised and enlarged. E. P. ADAMS. November, 1923. 109 pp. Price $1.50.

Number 40. Honors courses in American colleges and universities. FRANK AYDELOTTE. January, 1924. 57 pp. Price $0.75. [Out of print. See Number 52.]

Number 41. Transactions of the American Geophysical Union, Fourth Annual Meeting, April, 1923, Washington, D. C. January, 1924. 150 pp. Price $2.00.

Number 42. Coöperative experiments upon the protein requirements for the growth of cattle. Report of Subcommittee on Animal Nutrition. E. B. FORBES, Chairman. February, 1924. 44 pp. Price $0.75.

VOLUME 8

Number 43. Proceedings of the Third Annual Meeting of the Advisory Board on Highway Research, Division of Engineering, National Research Council. Edited by WILLIAM KENDRICK HATT and E. R. OLBRICH. March, 1924. 161 pp. Price $2.00.

Number 44. The continental shelf off the coast of California. ANDREW C. LAWSON. April, 1924. 23 pp. Price $0.40.

Number 45. Minimum specifications for highway engineering positions. By Committee on Specifications for Highway Engineering Positions, American Associa-

tion of Engineers. A. B. McDaniel, Chairman. May, 1924. 105 pp. Price $1.00.

Number 46. The geological implications of the doctrine of isostasy. Andrew C. Lawson. June, 1924. 22 pp. Price $0.40.

Number 47. Classified list of published bibliographies in physics, 1910–1922. Karl K. Darrow. July, 1924. v, 102 pp. Price $2.00.

Volume 9

Number 48. Critical potentials. K. T. Compton and F. L. Mohler. September, 1924. 135 pp. Price $1.60. Translated into German by Rudolf Suhrmann: "Ionisierungs- und Anregungsspannungen," and published in *Fortschritte der Chemie, Physik und physikalischen Chemie*, volume 18, number 6, 1925. 148 pp.

Number 49. An evaluation of the system of central financial control of research in State governments. Leonard D. White. December, 1924. 134 pp. Price $1.25. [Out of print.]

Number 50. Bibliography of bibliographies on chemistry and chemical technology, 1900–1924. Compiled by Clarence J. West and D. D. Berolzheimer. March, 1925. 308 pp. Price $2.50.

Volume 10

Number 51. Radioactivity. A. F. Kovarik and L. W. McKeehan. March, 1925. 203 pp. Price $2.25.

Number 52. Honors courses in American colleges and universities. Second edition, revised. Frank Aydelotte. April, 1925. 96 pp. Price $1.00.

Number 53. Transactions of the American Geophysical Union, Sixth Annual Meeting, April 30 and May 1, 1925, Washington, D. C. July, 1925. 80 pp. Price $1.00.

Number 54. Quantum principles and line spectra. J. H. Van Vleck. March, 1926. 316 pp. Price $3.00.

REPRINT AND CIRCULAR SERIES

Number 1. Report of the Patent Committee of the National Research Council. Presented for the Committee by L. H. Baekeland, Acting Chairman. February, 1919. 24 pp. Reprinted from *Chemical and Metallurgical Engineering*, 20: 150–1, 1919. Price $0.30.

Number 2. Report of the Psychology Committee of the National Research Council. Presented for the Committee by Robert M. Yerkes, Chairman. March, 1919. 51 pp. Reprinted from *Psychological Review*, 26: 83–149, 1919. Price $0.60. [Out of print.]

Number 3. Refractory materials as field for research. Edward W. Washburn. January, 1919. 24 pp. Reprinted from *Journal of the American Ceramic Society*, 2: 3–31, 1919. Price $0.30.

Number 4. Industrial research. Frank B. Jewett. 1918. 16 pp. Reprinted from *Transactions of the Royal Canadian Institute*, 12: 117–32, 1918. Price $0.25.

Number 5. Some problems of sidereal astronomy. Henry Norris Russell. October, 1919. 26 pp. Reprinted from *Proceedings of the National Academy of Sciences*, 5: 391–416, 1919. Price $0.30.

Number 6. The development of research in the United States. James Rowland Angell. November, 1919. 19 pp. Reprinted from *Proceedings of the Twenty-third Annual Convention of the Association of American Agricultural Colleges and Experiment Stations*, Chicago, November, 1919, pp. 84–97. Price $0.25.

Number 7. The larger opportunities for research on the relations of solar and terrestrial

radiation. C. G. ABBOT. February, 1920. 15 pp. Reprinted from *Proceedings of the National Academy of Sciences*, 6: 82–95, 1920. Price $0.20.

Number 8. Science and the industries. JOHN J. CARTY. February, 1920. 16 pp. Price $0.25.

Number 9. A reading list on scientific and industrial research and the service of the chemist to industry. CLARENCE JAY WEST. April, 1920. 45 pp. Price $0.50.

Number 10. Report on the organization of the International Astronomical Union. Presented for the American Section, International Astronomical Union, by W. W. CAMPBELL, Chairman, and JOEL STEBBINS, Secretary. June, 1920. 48 pp. Reprinted from *Proceedings of the National Academy of Sciences*, 6: 349–96, 1920. Price $0.50.

Number 11. A survey of research problems in geophysics. Prepared by Chairmen of Sections of the American Geophysical Union. October, 1920. 57 pp. Reprinted from *Proceedings of the National Academy of Sciences*, 6: 545–601, 1920. Price $0.60.

Number 12. Doctorates conferred in the sciences in 1920 by American universities. Compiled by CALLIE HULL. November, 1920. 9 pp. Reprinted from *Science*, N. S., 52: 478–83, 514–7, 1920. Price $0.20. [Out of print.]

Number 13. Research problems in colloid chemistry. WILDER D. BANCROFT. January–April, 1921. 54 pp. Reprinted from *Journal of Industrial and Engineering Chemistry*, 13: 83–9, 153–8, 260–4, 346–51, 1921. Price $0.50. [Out of print.]

Number 14. The relation of pure science to industrial research. JOHN J. CARTY. October, 1916. 16 pp. Reprinted from *Science*, N. S., 44: 511–8, 1916. Price $0.20.

Number 15. Researches on modern brisant nitro explosives. C. F. VAN DUIN and B. C. ROETERS VAN LENNEP. Translated by Charles E. Munroe. February, 1920. 35 pp. Originally appeared in *Recueil des Travaux Chimiques des Pays-Bas*, 39: 145–77, 1920.

Number 16. The reserves of the Chemical Warfare Service. CHARLES H. HERTY. February, 1921. 17 pp. Price $0.25.

Number 17. Geology and geography in the United States. EDWARD B. MATHEWS and HOMER P. LITTLE. April, 1921. 22 pp. Reprinted from *Bulletin of the Geological Society of America*, 32: 227–48, 1921. Price $0.20. [Out of print.]

Number 18. Industrial benefits of research. CHARLES L. REESE and A. J. WADHAMS. February, 1921. 14 pp. Price $0.25.

Number 19. The university and research. VERNON KELLOGG. June, 1921. 10 pp. Reprinted from *Science*, N. S., 54: 19–23, 1921. Price $0.15. [Out of print.]

Number 20. Libraries in the District of Columbia. Compiled by W. I. SWANTON in coöperation with the Research Information Service of the National Research Council and Special Libraries. June, 1921. 19 pp. Reprinted from *Special Libraries*, 12: 135–53, 1921. Price $0.25.

Number 21. Scientific abstracting. GORDON S. FULCHER. September, 1921. 15 pp. Reprinted from *Science*, N. S., 54: 291–5, 1921. Price $0.20.

Number 22. The National Research Council. Its services for mining and metallurgy. ALFRED D. FLINN. October, 1921. 7 pp. Reprinted from *Mining Congress Journal*, 7: 412–4, 1921. Price $0.20.

Number 23. American research chemicals. CLARENCE J. WEST. September, 1921. 28 pp. Price $0.50. [Replaced by Number 44.]

Number 24. Organomagnesium compounds in synthetic chemistry; a bibliography

of the Grignard reaction, 1900–1921. CLARENCE J. WEST and HENRY GILMAN. January, 1922. 103 pp. Price $1.50. [Out of print.]

Number 25. A partial list of the publications of the National Research Council to January 1, 1922. February, 1922. 15 pp. Price $0.25.

Number 26. Doctorates conferred in the sciences by American universities in 1921. Compiled by CALLIE HULL and CLARENCE J. WEST. March, 1922. 20 pp. Reprinted from *Science*, N. S., 55: 271–9, 1922. Price $0.20.

Number 27. List of manuscript bibliographies in geology and geography. Compiled by HOMER P. LITTLE. February, 1922. 17 pp. Price $0.25.

Number 28. Investment in chemical education in the United States, 1920–1921. CLARENCE J. WEST and CALLIE HULL. March, 1922. 3 pp. Reprinted from *Journal of Industrial and Engineering Chemistry*, 14: 237, 1922. Price $0.15.

Number 29. Distribution of graduate fellowships and scholarships between the arts and sciences. Compiled by CALLIE HULL and CLARENCE J. WEST. April, 1922. 5 pp. Reprint from *School and Society*, 15: 424–8, 1922. Price $0.15.

Number 30. The first report of the Committee on Contact Catalysis. WILDER D. BANCROFT, Chairman. In collaboration with the other members of the committee. April–July, 1922. 43 pp. Reprinted from *Journal of Industrial and Engineering Chemistry*, 14: 326–31, 444–7, 545–8, 642–6, 1922. Price $0.50.

Number 31. The status of "clinical" psychology. F. L. WELLS. January, 1922. 12 pp. Reprinted from *Mental Hygiene*, 6: 11–22, 1922. Price $0.20.

Number 32. Moments and stresses in slabs. H. M. WESTERGAARD and W. A. SLATER. April, 1922. 124 pp. Reprinted from *Proceedings of the American Concrete Institute*, 17: 415–538, 1921. Price $1.00.

Number 33. Informational needs in science and technology. CHARLES L. REESE. May, 1922. 10 pp. Reprinted from *Journal of Industrial and Engineering Chemistry*, 14: 364, 1922. Price $0.20.

Number 34. Indexing of scientific articles. GORDON S. FULCHER. August, 1922. 16 pp. Price $0.20.

Number 35. American research chemicals. First revision. CLARENCE J. WEST. May, 1922. 37 pp. Price $0.50. [Replaced by Number 44.]

Number 36. List of manuscript bibliographies in chemistry and chemical technology. CLARENCE J. WEST and CALLIE HULL. December, 1922. 17 pp. Reprinted from *Journal of Industrial and Engineering Chemistry*, 14: 1075, 1922. Price $0.25.

Number 37. Recent geographical work in Europe. W. L. G. JOERG. July, 1922. 54 pp. Reprinted from *Geographical Review*, 12: 431–84, 1922. Price $0.50.

Number 38. The abstracting and indexing of biological literature. J. R. SCHRAMM. November, 1922. 14 pp. Reprinted from *Science*, N. S., 56: 495–501, 1922. Price $0.25. [Out of print.]

Number 39. A national focus of science and research. GEORGE ELLERY HALE. November, 1922. 16 pp. Reprinted from *Scribner's Magazine*, 72: 515–31, 1922. Price $0.25.

Number 40. The usefulness of analytic abstracts. GORDON S. FULCHER. December, 1922. 6 pp. Reprinted from *Science*, N. S., 56: 678–80, 1922. Price $0.15.

Number 41. List of manuscript bibliographies in astronomy, mathematics, and physics. CLARENCE J. WEST and CALLIE HULL. March, 1923. 14 pp. Price $0.25.

Number 42. Doctorates conferred in the arts and the sciences by American universities, 1921–1922. CLARENCE J. WEST and CALLIE HULL. March, 1923. 14 pp. Reprinted from *School and Society*, 17: 57–63, 106–9, 132–9, 1923. Price $0.25.

Number 43. Functions of the Division of Geology and Geography of the National

Research Council. NEVIN M. FENNEMAN. December, 1922. 7 pp. Reprinted from *Science*, N. S., 56: 620–4, 1922. Price $0.20.

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